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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

: **Confirmation No.**

Michitaka SATO et al.

: Attorney Docket No. 2006\_1414A

Serial No. 10/590,707

:

Filed August 25, 2006

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PYRIMIDINE DERIVATIVES

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEES FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA. 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of the references listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

- ☐ each U.S. Patent and U.S. Patent application publication;
- ☐ each reference previously cited in the international application PCT/\_\_\_\_\_; and/or
- ☐ each reference previously cited in prior parent application Serial No. \_\_\_\_\_.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

- 1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) ☐ the certification of paragraph 2 below is provided, **or**  
(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and  
the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

- a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or  
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☐ a foreign patent office search report (in the English language) submitted herewith,
  - c. ☐ the concise explanation contained in the specification of the present application at page,
  - d. ☐ the concise explanation set forth in the attached English language abstract,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ A foreign patent office search report citing one or more of the references is enclosed.
6. ☐ Statement Under 37 CFR 1.704(d)

Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign Patent Office in a counterpart application, and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

7. With respect to the references cited in the specification of this application at pages 1 and 2, enclosed are copies of the following references:

D1 WO 99/17755

D2 J. Med. Chem., 40, 574-585 (1997)

D3 Eur. J. Med. Chem., 35, 677-689 (2000)

D4 Bioorg. Med. Chem. Lett., 13, 3177-3180 (2003)

8. Enclosed are the following references cited in the International Search Report:

D5 WO 02/48117 A1

D6 MERINO Isidro, Synthesis and anti-HIV-1 activities of new pyrimido [5,4-b]indoles, Il Farmaco, 1999, Vol 54, No. 4, pages 255 to 264, Table 1

D7 WO 02/30406 A2


D8 JP 2001-518495 A (Japanese language publication)

Note: This document corresponds to WO 99/17755 which is cited in the specification of this application (see D1 reference above).

D9 ABE Michikazu, Reduction of Wrap Restraint Stress-Induced Defecation by MKC-242, a Novel Benzodioxan Derivative, via 5-HT<sub>1A</sub>-Receptor Agonist Action in Rats, Jpn. J. Pharmacol., 1998, Vol. 77, pages 211 to 217

Respectfully submitted,

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November 14, 2006

## INFORMATION DISCLOSURE STATEMENT

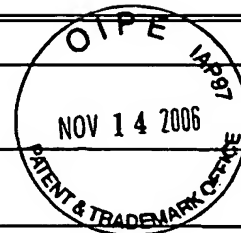
FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: November 14, 2006

ATTY DOCKET NO.  
2006\_1414ASERIAL NO.  
10/590,707APPLICANT  
Michitaka SATO et al.FILING DATE  
August 25, 2006

GROUP



## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AB	99/17755	4/1999	GB			
	AC	02/48117	6/2002	WO			X
	AD	02/30406	4/2002	IE			
	AE	2001-518495	10/2001	JP			Corresp. to AB

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AF	MODICA Marie et al., "[[(Arylpiperazinyl)alkyl]thio]thieno[2,3-d]pyrimidinone Derivatives as High-Affinity, Selective 5-HT <sub>1A</sub> Receptor Ligands", J. Med. Chem. 1997, 40, 574-585
	AG	MODICA Maria et al., "High affinity and selectivity of [[(arylpiperazinyl)alkyl]thio]thieno[2,3-d]pyrimidinone derivatives for the 5-HT <sub>1A</sub> receptor. Synthesis and structure-affinity relationships", Eur. J. Med. Chem. 35 (2000) 677-689
	AH	LÓPEZ-RODRÍGUEZ Maria L. et al., "Design and Synthesis of New Benzimidazole-Arylpiperazine Derivatives Acting as Mixed 5-HT <sub>1A</sub> /5-HT <sub>3</sub> Ligands", Bioorganic & Medicinal Chemistry Letters 13 (2003) 3177-3180
	AI	ABE Michikazu et al., "Reduction of Wrap Restraint Stress-Induced Defecation by MKC-242, a Novel Benzodioxan Derivative, via 5-HT <sub>1A</sub> -Receptor Agonist Action in Rats", Jpn. J. Pharmacol. 77, 211-217 (1998)
	AJ	MERINO Isidro, "Synthesis and anti-HIV-1 activities of new pyrimido [5,4-b]indoles", II Farmaco 54 (1999) 255-264
	AK	
	AL	
	AM	

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EXAMINER

DATE CONSIDERED